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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,229	08/20/2001	Blue John Ramsey	78104.025	9574

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EXAMINER

WONG, EDNA

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/857,229

Applicant(s)

RAMSEY ET AL.

Examiner

Edna Wong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34 and 36-54 is/are pending in the application.
4a) Of the above claim(s) 51-54 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 34, 36-47, 49 and 50 is/are rejected.
7) ☒ Claim(s) 48 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date October 25, 2004.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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This is in response to the Amendment dated April 20, 2005. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Claim Rejections - 35 USC § 112

Claims **41 and 47** have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 41 and 47 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 102

Claims **34 and 36-47** have been rejected under 35 U.S.C. 102(e) as being anticipated by **Suzuki et al.** (US Patent No. 6,051,645).

The rejection of claims 34 and 36-47 under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. is as applied in the Office Action dated October 21, 2004 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that lithographic inks are *inherently compositionally very different* from inkjet inks in several respects, thereby differentiating claim 34 from *Suzuki*.

In response, claim 34, lines 2-4, recites "the ink comprising a metal or carbon

particulate material; suspended in a mixture of a resin, an antioxidant and an organic solvent, wherein the resin comprises a polyamide.” Calling this composition a “lithographic ink” does make this composition inherently different from the inkjet ink disclosed by Suzuki because *Suzuki* teaches all of the components in the present composition. Similar products can reasonably be expected to inherently have the same properties.

Furthermore, it is well settled that unpatented claims are given the broadest, most reasonable interpretation and that limitations are not read into the claims without a proper claim basis therefor. *In re Prater* 415 F. 2d 1393, 162 USPQ 541 (CCPA 1969); *In re Zeltz* 893 F. 2d 319, 13 USPQ 1320.

Applicants state that it should be appreciated that the initial “lithographic ink” limitation in claim 34 is *not* a mere statement of use, but is rather a recitation which characterizes the fundamental properties of the ink and differentiates it from other inks (such as that of *Suzuki*).

In response, claim 34, lines 2-4, recites “the ink comprising a metal or carbon particulate material; suspended in a mixture of a resin, an antioxidant and an organic solvent, wherein the resin comprises a polyamide.” Calling this composition a “lithographic ink” does not characterize the fundamental properties of the ink and differentiates it from other inks because claim 34 as presently written are open include many more elements than those positively recited and are open to a broad range of

values for hydrophobicity, viscosity, solid content and liquid content, for example.

Furthermore, it is well settled that unpatented claims are given the broadest, most reasonable interpretation and that limitations are not read into the claims without a proper claim basis therefor. *In re Prater* 415 F. 2d 1393, 162 USPQ 541 (CCPA 1969); *In re Zeltz* 893 F. 2d 319, 13 USPQ 1320.

Applicants state that one would not look to *Suzuki* to address issues related to lithographic inks, since the properties of inkjet and lithographic inks are so different that an ordinary artisan would not regard an inkjet ink as providing useful properties for a lithographic ink.

In response, the Applicant has a different reason for, or advantage resulting from doing what the prior art relied upon has suggested, it is noted that it is well settled that this is not demonstrative of nonobviousness. *In re Kronig* 190 USPQ 425, 428 (CCPA 1976); *In re Linter* 173 USPQ 560 (CCPA 1972); the prior art motivation or advantage may be different than that of Applicants while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979); *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985) and MPEP § 2144.

Applicants state that it is also notable that while the Office Action states that all of the recited contents of the lithographic ink of claim 34 are disclosed by *Suzuki*, it is questionable whether *Suzuki* truly describes or suggests the specific combination

recited in claim 34.

In response, the disclosure of reference must be considered for what it fairly teaches one of ordinary skill in the art, pertinence of non-preferred disclosure must be reviewed in such light. See MPEP § 2123.

Applicants state that owing to the differences between lithographic and inkjet inks, and the lack of suggestion whatsoever that the specific combination noted in claim 34 would yield any particular advantages (as an inkjet ink or as a lithographic ink), claim 34 is also not obvious in view of *Suzuki*.

In response, the Applicant has a different reason for, or advantage resulting from doing what the prior art relied upon has suggested, it is noted that it is well settled that this is not demonstrative of nonobviousness. *In re Kronig* 190 USPQ 425, 428 (CCPA 1976); *In re Linter* 173 USPQ 560 (CCPA 1972); the prior art motivation or advantage may be different than that of Applicants while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979); *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985) and MPEP § 2144.

Furthermore, Applicants call the present composition a lithographic ink in the preamble, but is not claiming one in the body of the claim because essential elements are omitted.

Applicants state that the Office Action's approach ignores clearly the recited claim limitations of claims 36-47, and is thus improper because the entirety of the claim

must be considered.

In response, the Examiner did consider these claim limitations and did not find them to distinguish the ink composition from the prior art.

For example, the Examiner considered the claim limitation of "the ink is printed on the substrate ..." (claims 36-38) as not being compositionally distinguishing from the ink of the prior art because this is not a component physically in the composition.

Response to Amendment

Election/Restrictions

Newly submitted claims **51-54** are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The inventions originally claimed were:

- (a) a process for forming a conductive layer on a substrate (classified in Class 205, subclass 187); and
- (b) a lithographic ink (classified in Class 523, subclass 160).

The substrate with a conductive layer as presented in claims 51-54 is independent or distinct from the invention originally claimed because it is neither a process nor a composition, and is classified in Class 428, subclass 458. All of which the Examiner were not originally presented with, and thus, required to consider beforehand.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for

prosecution on the merits. Accordingly, claims **51-54** are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

I. Claims **49 and 50** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants' specification does not disclose:

(a) "wherein the ink is at least substantially free of water" (from claim 49, lines 1-2);

(b) "at least one of metal and carbon" (from claim 50, line 3).

Applicants' specification recites "a particulate material suspended" (page 3, lines 20-21) and "is particulate metal **or** carbon" (page 3, line 22); and

(c) "wherein the mixture is at least substantially free of water" (from claim 50, line 8);

These limitations are new matter.

II. Claims **36-47** are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36

line 2, it appear that “a substrate with at least one electrically conducting layer situated thereon” is further limiting the polymer substrate recited in claim 34, line 2. However, it is unclear if it is.

Claim 37

line 2, it appear that “a substrate with at least two or more stacked electrically conducting layers situated thereon” is further limiting the polymer substrate recited in claim 34, line 2. However, it is unclear if it is.

Claim 38

line 2, it appear that “a substrate with a first electrically conducting layer deposited thereon by electroless deposition” is further limiting the polymer substrate recited in claim 34, line 2. However, it is unclear if it is.

Claim 42

line 2, it appears that “a flexible polymer sheet” is further limiting the polymer substrate recited in claim 34, line 2. However, it is unclear if it is.

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Claim 43

line 2, it appears that "a substrate" is the same as the polymer substrate recited in claim 34, line 2. However, it is unclear if it is. See also claim 44, line 1.

Claim 46

lines 1-3, it is unclear how the lithographic ink further comprises a second electrically conducting layer electroplated atop the first electrically conducting layer. How is this a component physically in the composition?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim **49** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Suzuki et al.** (US Patent No. 6,051,645) as applied to claims 34 and 36-47 above.

Suzuki is as applied in the Office Action dated October 21, 2004 and incorporated herein.

Suzuki does not teach where the ink is at least substantially free of water.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because Suzuki teaches varying concentrations of water in Examples 1-8 (cols. 10-14). In Example 4 (col. 12, line 36), 33.95 parts by weight of ultra pure water was used. This is at least substantially free of water when compared to the 70 parts by weight of ultra pure water used in Example 1 (col. 10, line 39).

"At least substantially free of water" are relative terms as to what one is comparing it to. Furthermore, these terms do not designate a specific value.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

Claim **48** defines over the prior art of record because the prior art does not teach or suggest the lithographic ink of claim 34 wherein the metal or carbon particulate material constitutes 50-90% of the weight of the ink.

Claim **50** defines over the prior art of record because the prior art does not teach or suggest a lithographic ink for use in a lithographic printing process, the ink comprising: (a) a particulate material and (b) a mixture as presently claimed, esp., (a) a particulate material which constitutes 50-90% of the weight of the ink, the particulate material including at least one of metal and carbon.

The prior art does not contain any language that teaches or suggests the above.

Suzuki et al. teach that the pigment is used in the range from 1 to 20% (col. 8, lines 65-67). Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

Claim 48 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 50 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

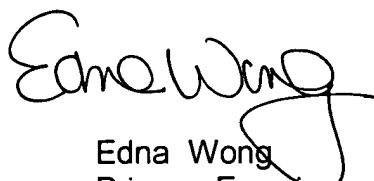
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free).


Edna Wong
Primary Examiner
Art Unit 1753

EW
May 23, 2005